

SCOTT BRENT NELSON

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Doctoral Candidate

University of Illinois at Urbana-Champaign

Department of Natural Resources and Environmental Sciences

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Urbana-Champaign (USA)

Education

2012 – Present: PhD student, Natural Resources and Environmental Sciences,
University of Illinois at Urbana-Champaign

2006 – 2010: *Ars Bachelorium*, University of Chicago; major in Biological Sciences

Fall 2009: Savanna Ecology and Conservation program; Organization for Tropical Studies, South Africa

Professional Experience

Fall 2012 – Present: PhD student

Lab of Dr. James Miller, Dept. of Natural Resources and Environmental Sciences, University of Illinois at Urbana-Champaign

- Habitat selection and fitness of male and female Dickcissels (*Spiza americana*) over hierarchically nested spatial scales in Midwestern grasslands

Fall 2013 – Spring 2014: Volunteer bird bander

Assisted with graduate research programs of Christine Parker (UIUC), Sarah Schneider (UIUC), and Henry Pollock (UIUC, Smithsonian Tropical Research Institute in the Republic of Panama)

Summer 2010 – Summer 2012: Research Support Specialist

Lab of Dr. Jennifer Thaler, Dept. of Entomology, Cornell University

- Behavioral and chemical ecology in tri-trophic systems of insects and Solanaceous plants

Summer 2007 – Spring 2010: Undergraduate Research Assistant

Lab of Dr. Aaron Turkewitz, Dept. of Molecular Genetics and Cell Biol., University of Chicago

- Membrane trafficking and phagosomal maturation in the ciliate *Tetrahymena thermophila*

Summer 2007: Undergraduate Research Assistant

Lab of Dr. Martin Kreitman, Dept. of Ecology and Evolution, University of Chicago

- Evolutionary selection due to climatic environment in *Drosophila melanogaster*

Teaching experience

Spring 2015: Teaching assistant for NRES 456 Integrated Ecosystem Management

- Duties included grading, maintenance of compass website, holding student office hours, and class organization

Published Articles

Bright L.J., Kambesis N., **Nelson S.B.**, Jeong B., Turkewitz A.P. 2010. Comprehensive Analysis Reveals Dynamic and Evolutionary Plasticity of Rab GTPases and Membrane Traffic in *Tetrahymena thermophila*. PLoS Genet 6 (10): e1001155. doi:10.1371/journal.pgen.1001155

Oral presentations

S. Nelson and J. Miller. (February, 2015). Adaptive habitat selection in birds is complicated by tradeoffs among different components of fitness. UIUC Graduates in Ecology and Evolutionary Biology Research Symposium. Urbana, IL.

S. Nelson and J. Miller. (February, 2015). Habitat preferences and reproductive success in the dickcissel. Midwest Fish and Wildlife Conference. Indianapolis, IN.

D. Halaney, **S. Nelson**, and V. Tandukar. (November, 2009). The differences in the diversity of ground-dwelling arthropod taxa under large and small trees. Presentation to an assembly of South African National Parks staff and scientists. Kruger National Park, Mpumalanga Province, South Africa.

Poster presentations

D. Jen, **S. Nelson**, and J. Miller. (April, 2015). The Spatial and Territorial Dynamics of Male Dickcissels (*Spiza americana*) Throughout Their Breeding Cycle. ACES Undergraduate Research Symposium.

Y. Chen, **S. Nelson**, and J. Miller. (April, 2015). Territory selection and breeding success of dickcissels over fine spatial and temporal scales. Researchers Initiative Poster Symposium.

M. Gusztyn, R. Kumar, **S. Nelson**, and J. Miller. (April, 2014). Assessing whether male Dickcissels prefer to settle in habitats where they achieve the greatest reproductive success. Researchers Initiative Poster Symposium.

Honors and Awards

NRES Educational Opportunity Grant, 2014 for travel to the Republic of Panama for bird banding training (\$350)

Jonathan Baldwin Turner Fellowship 2012-2014 for Graduate Degree Program in Natural Resources and Environmental Sciences, University of Illinois at Urbana-Champaign (\$20,000 per year)

General Honors for A.B. studies at the University of Chicago, 2010

Award from the Organization for Tropical Studies Grant Committee, 2009 (\$2,500)

Extracurricular Work

2014-Present: President of the UIUC registered students' organization Red Bison; my role is to plan and organize our organization's native planting and invasive species removal projects, as well as to retain and recruit members in the group

2014-2015: Graduate Representative of the UIUC Student Chapter of the Wildlife Society; my role was to connect undergraduate student desiring research experience with graduate students who are able to provide such opportunities, in addition to creating a wildlife photo calendar

2012-2014: Outreach Officer of the UIUC registered students' organization Red Bison; my role was to engage with the student community to increase involvement with our organization's prairie restoration activities, and to participate in native planting and invasive species removal projects

2003-2009—Drums, musical arrangement, lyrics, and artwork for studio recordings and live performances in several bands representing a variety of musical styles.

- 2011—Drums, arrangements, lyrics, and artwork on *Eos* EP by 'Solecism'